

## General Scheme of the Studying Plan

Requirement Type	Course Title	Prerequisites	Credit Hours
Preparatory Year Requirements	ENG 140 : English Language (1)		8
	ENG 150 : English Language (2)	ENG 140	8
	MATH 140 : Introduction to Mathematics		2
	MATH 150 : Differential Calculus	Math 140	3
	CT 140 : Computer Skills		3
	CI 140 : Learning, Thinking and Research Skills		3
	CHS 150 : Health and Fitness (2)		1
	MC 140 : Communication Skills		2
	ENT 101 : Entrepreneurship		1
<b>Total</b>			<b>31</b>

University Requirements	
Students choose 8 credit hours from courses in Islamic Culture	<b>8</b>

Requirement Type	Course Title	Prerequisites	Credit Hours
Mathematics Department Requirements	MATH 111 : Integral Calculus	MATH 150	4(3+1)
	MATH 201 : Differential and Integral Calculus	MATH 111	4(3+1)
	MATH 240 : Introduction to Linear Algebra	MATH 111	4(3+1)
	MATH 280 : Introduction to Real Analysis	MATH 201	4(3+1)
	MATH 380 Stochastic Processes (1)	MATH 280 & STAT 215	4(3+1)
	ACTU 361 : Mathematics of Finance (1)	MATH 201	3(3+0)
	ACTU 362 : Actuarial Mathematics (1)	ACTU 361 & STAT 215	3(3+0)
	ACTU 363 : Actuarial Mathematics Lab (1)	Department approval	1(0+1)
	ACTU 462 : Actuarial mathematics (2)	ACTU 362	3(3+0)
	ACTU 464 : Risk Theory	MATH 380 & ACTU 362	3(3+0)
	ACTU 465 : Credibility Theory	ACTU 464	3(3+0)
	ACTU 466 : Loss Distributions	ACTU 464 & STAT 436	3(3+0)
ACTU 499 : Field Training	ACTU 462	3(1+2)	
<b>Total</b>			<b>42</b>

Requirement Type	Course Title	Prerequisites	Credit Hours
Compulsory Requirements from Other Departments	ACCT 201: Principles of Accounting and Financial Reporting		3(3+0)
	FIN 200 : Principles of Finance	ACCT 201	3(3+0)
	FIN 210 : Corporate Finance	FIN 200	3(3+0)
	ECON 101 : Principles of Microeconomics		3(3+0)
	ECON 102 : Principles of Macroeconomics	ECON 101	3(3+0)
	CSC 201: Computer Programming		4(3+1)
	CSC 202: Computer Programming using MATLAB	CSC 201	3(2+1)
	STAT 100 : Introduction to Statistics	MATH 150	3(2+1)
	STAT 105 : Statistical Methods	STAT 100	4(3+1)
	STAT 215 : Probability (1)	MATH 111 & STAT 100	4(3+1)
	STAT 328 : Statistical Packages	STAT 105	3(2+1)
	STAT 332 : Regression Analysis	MATH 240 & STAT 328	3(2+1)
	STAT 436 : Time Series and Forecasting	STAT 332	3(2+1)
OPER 441 : Modeling and Simulation	STAT 215 & CSC 202	4(3+1)	
<b>Total</b>			<b>46</b>

Students must successfully complete 9 credit hours to be chosen from this list.			
Requirement Type	Course Title	Prerequisites	Credit Hours
	MATH 225 : Introduction to differential equations	MATH 201	4(3+1)
	MATH 251 : Optimization techniques	MATH 280 & MATH 225	3(3+0)
	MATH 422 : Partial differential equations	MATH 225	4(3+1)
	MATH 450 : Numerical methods	MATH 225 & MATH 240	4(3+1)
	ACTU 364 : Actuarial Mathematics Lab (2)	Department approval	1(0+1)
	ACTU 461 : Mathematics of finance (2)	ACTU 361	4(3+1)
	ACTU 467 : Pension mathematics	ACTU 462	3(3+0)
	ACTU 468 : Quantitative methods in finance	MATH 380	4(3+1)
	FIN 220 : Investment Essentials	FIN 200	3(3+0)
	FIN 240 : Principles of Risk & Insurance	FIN 200	3(3+0)
	ECON 201 : Microeconomics analysis	ECON 102	3(3+0)
	STAT 223 : Theory of Statistics (1)	STAT 215	3(2+1)
<b>Total</b>			<b>9</b>

## Course Prerequisites Diagram



